

Amendments to the claims are reflected in the listing of claims which begins on page 3 of this paper.

Remarks begin on page 14 of this paper.

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (currently amended) A compression plate anastomosis apparatus for anastomosing a first vessel to a second vessel, comprising:

a first compression plate having a first compression plate opening;

wherein the first compression plate opening has a perimeter defined by first holding means for holding a portion of the first vessel that defines a first vessel opening, wherein the first compression plate is shaped to enable the first vessel portion to extend through the first compression plate opening in a manner such that the first vessel opening conforms to the perimeter of the first compression plate opening, and wherein the first holding means is adapted to hold the first vessel portion in a manner such that the first vessel portion is at least partially everted and is not penetrated; and

a second compression plate having a second compression plate opening;

wherein the second compression plate opening is defined by second holding means for holding a portion of a second vessel that defines a second vessel opening,

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wherein the first compression plate and the second compression plate have means for locking the compression plates together such that the portion defining the first vessel opening and the portion defining the second vessel opening are joined without being penetrated ~~such that~~ when the first vessel and the second vessel are anastomosed together, and

wherein the first holding means is shaped to hold the first vessel portion in a configuration such that when the first vessel portion and the second vessel portion are anastomosed together there is an uneven distribution of force *caused by the shape of the holding means* against the first vessel portion

2. (original) A compression plate anastomosis apparatus as recited in claim 1, wherein the first and second compression plates are snap-fit compression plates that are configured such that the locking means snap into place when the compression plates are brought together.

3. (original) A compression plate anastomosis apparatus as recited in claim 1, wherein the locking means comprises a plurality of locking arms extending from an outer periphery of a ring of the first compression plate and a locking extension of the second compression plate.

4. (original) A compression plate anastomosis apparatus as recited in claim 3, wherein the locking arms of the first compression plate have a length that enables the arms to lock around the locking extension in a manner such that the portion defining the first vessel opening and the portion defining the second vessel opening are held together without being damaged in a manner that causes the anastomosis to fail.

5. (original) A compression plate anastomosis apparatus as recited in claim 1, wherein the first holding means comprises a plurality of holding tabs extending from an inner periphery of a ring of the first compression plate.

6. (original) A compression plate anastomosis apparatus as recited in claim 1, wherein the second holding means is a holding surface located around the second compression plate opening with a configuration such that the portion of the second vessel defining the second vessel opening may be everted onto the holding surface.

7. (original) A compression plate anastomosis apparatus as recited in claim 6, wherein the holding surface extends radially downward at an angle from the second compression plate opening.

8. (withdrawn) A compression plate anastomosis apparatus as recited in claim 1, wherein the locking means comprises means for guiding the movement of one compression plate relative to the other, wherein the guiding means extend from one of the compression plates to enable one compression plate to be moved in a fixed parallel orientation relative to the other compression plate, wherein the guiding means have a length and configuration that permits the first vessel opening and the second vessel opening to be initially spaced apart and opposite from each other and then to be advanced toward each other as one compression plate is moved toward the other while each holding means holds the respective vessels until the compression plates bring the second vessel portion that defines the second vessel opening into contact with the first vessel portion that defines the first vessel opening such that the first vessel and the second vessel are anastomosed together.

9. (withdrawn) A compression plate anastomosis apparatus as recited in claim 8, wherein the compression plate opposite from the compression plate from which the guiding means extends has plurality of holes through which the guiding means are inserted such that the compression plate is a glidably mounted on the guiding means, and wherein the holes are sized to provide frictional resistance to movement of the glidably mounted compression plate on the guiding means.

10. (original) A compression plate anastomosis apparatus as recited in claim 1, wherein the first holding means comprises a first plurality of holding tabs and wherein the second holding means comprises a second plurality of holding tabs.

11. (original) A compression plate anastomosis apparatus as recited in claim 1, wherein said first and second compression plates each have an inner periphery at their respective opening, wherein said first and second holding means are located on the inner peripheries of the respective first and second compression plates.

12. (original) A compression plate anastomosis apparatus as recited in claim 1, wherein said first holding means are in mating configuration with respect to said second holding means once the second vessel is brought into contact with the first vessel for anastomosis.

13. (original) A compression plate anastomosis apparatus as recited in claim 1, wherein said second holding means is adapted to hold the portion of the second vessel that defines the second vessel opening in a manner such that the portion defining the second vessel opening is at least partially everted.

14. (withdrawn) A compression plate anastomosis apparatus as recited in claim 1, wherein said guiding means extend from the first compression plate with a perpendicular orientation.

15. (original) A compression plate anastomosis apparatus as recited in claim 1, wherein the locking means comprises at least one locking arm extending from an outer periphery of a ring of one of the compression plates and a locking extension on the other compression plate.

16. (original) A compression plate anastomosis apparatus as recited in claim 1, wherein the first compression plate and the second compression plate are adapted for use with vessel openings that are generally circular.

17. (withdrawn) A compression plate anastomosis apparatus as recited in claim 15, wherein the first compression plate and the second compression plate are adapted for use with the vessel openings that are noncircular.

18. (currently amended) A compression plate anastomosis apparatus for anastomosing vessels, comprising:

a first compression plate having a first compression plate opening;

wherein the first compression plate opening is defined by a plurality of holding tabs extending from a ring of said first compression plate, wherein the ring and the holding tabs are adapted to enable the portion of the first vessel defining the first vessel opening to extend through the first compression plate opening in a manner such that the first vessel opening conforms to the perimetrical shape of the first compression plate opening, and wherein the holding tabs are adapted to hold the first vessel portion in

a manner such that the first vessel portion is at least partially everted and is not penetrated; and

a second compression plate having a second compression plate opening;

wherein the second compression plate opening is defined by a holding surface located around the second compression plate opening with a configuration such that the portion of the second vessel defining the second vessel opening may be everted onto the holding surface;

wherein the first compression plate and the second compression plate have mated locking components to lock the compression plates together such that the portion defining the first vessel opening and the portion defining the second vessel opening are joined without being penetrated ~~such that~~ when the first vessel and the second vessel are anastomosed together.

19. (original) A compression plate anastomosis apparatus as recited in claim 18, wherein the first and second compression plates are snap-fit compression plates that are configured such that the locking components snap into place when the compression plates are brought together.

20. (previously presented) A compression plate anastomosis apparatus as recited in claim 18, wherein one of the mated locking components comprises a plurality of locking arms extending from an outer periphery of the ring of the first compression plates and the other mated locking component is a locking extension extending from the second compression plate.

21. (original) A compression plate anastomosis apparatus as recited in claim 20, wherein the locking arms have a length that enables the arms to lock around the locking extension in a manner such that the portion defining the first vessel opening and the portion defining the second vessel opening are held together without being damaged in a manner that causes the anastomosis to fail.

22. (currently amended) A compression plate anastomosis apparatus as recited in claim 18, wherein the plurality of holding tabs extend extending from an inner periphery of the ring of the first compression plate.

23. (currently amended) A compression plate anastomosis apparatus as recited in claim 18, wherein each holding tab ~~said plurality of holding tabs~~ terminates at a rounded tip ~~extend from the ring of the first compression plate toward an anastomosis side of the first compression plate.~~

24. (original) A compression plate anastomosis apparatus as recited in claim 18, wherein said plurality of holding tabs extend perpendicularly from the ring of the first compression plate.

25. (original) A compression plate anastomosis apparatus as recited in claim 18, wherein said plurality of holding tabs curve inward from an exterior side of the ring of the first compression plate such that distal ends of the holding tabs are perpendicularly oriented relative to the exterior side of the ring of the first compression plate.

26. (original) A compression plate anastomosis apparatus as recited in claim 18, wherein the holding surface extends radially downward at an angle from the second compression plate opening.

27. (original) A compression plate anastomosis apparatus as recited in claim 18, wherein the first compression plate and the second compression plate are adapted for use with vessel openings that are generally circular.

28. (withdrawn) A compression plate anastomosis apparatus as recited in claim 18, wherein the first compression plate and the second compression plate are adapted for use with ~~the~~ vessel openings that are noncircular.

29. (currently amended) A snap-fit compression plate anastomosis apparatus for anastomosing vessels, comprising:

a first compression plate having a first compression plate opening;

wherein the first compression plate opening is defined by a plurality of holding tabs extending from a ring of said first compression plate, wherein the ring and the holding tabs are adapted to enable the portion of the first vessel defining the first vessel opening to extend through the first compression plate opening in a manner such that the first vessel opening conforms to the perimetrical shape of the first compression plate opening, and wherein the holding tabs are adapted to hold the first vessel portion in a manner such that the first vessel portion is at least partially everted and is not penetrated; and

a second compression plate having a second compression plate opening;

wherein the second compression plate opening is defined by a holding surface located around the second compression plate opening with a configuration such that the portion of the second vessel defining the second vessel opening may be everted onto the holding surface;

wherein the first compression plate has an outer periphery from which a plurality of locking arms extend, wherein the locking arms are adapted to lock with a locking extension projecting from the second compression plate that enables the compression plates to lock together such that the portion defining the first vessel opening and the portion defining the second vessel opening are joined without being penetrated

~~such that~~ when the first vessel and the second vessel are anastomosed together.

30. (original) A compression plate anastomosis apparatus as recited in claim 29, wherein the locking arms have a length that enables the arms to lock around the locking extension in a manner such that the portion defining the first vessel opening and the portion defining the second vessel opening are held together without being damaged in a manner that causes the anastomosis to fail.

31. (currently amended) A compression plate anastomosis apparatus as recited in claim 29, wherein the plurality of holding tabs extend ~~extending~~ from an inner periphery of the ring of the first compression plate.

32. (currently amended) A compression plate anastomosis apparatus as recited in claim 29, wherein each holding tab ~~said plurality of holding tabs~~ terminates at a rounded tip ~~extend from the ring of the first compression plate toward an anastomosis side of the first compression plate.~~

33. (original) A compression plate anastomosis apparatus as recited in claim 29, wherein said plurality of holding tabs extend perpendicularly from the ring of the first compression plate.

34. (original) A compression plate anastomosis apparatus as recited in claim 29, wherein said plurality of holding tabs curve inward from an exterior side of the ring of the first compression plate such that distal ends of the holding tabs are perpendicularly oriented relative to the exterior side of the ring of the first compression plate.

35. (original) A compression plate anastomosis apparatus as recited in claim 29, wherein the holding surface extends radially downward at an angle from the second compression plate opening.

36. (original) A compression plate anastomosis apparatus as recited in claim 29, wherein the first compression plate and the second compression plate are adapted for use with vessel openings that are generally circular.

37. (withdrawn) A compression plate anastomosis apparatus as recited in claim 29, wherein the first compression plate and the second compression plate are adapted for use with the vessel openings that are noncircular.